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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/090,020	03/05/2002	Claes Bertil Blom	23032	3889

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LAW OFFICE OF LAWRENCE E LAUBSCHER, JR
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EXAMINER

MOONEY, MICHAEL P

ART UNIT	PAPER NUMBER
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2877

DATE MAILED: 10/01/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/090,020	Applicant(s) BLOM ET AL.	
	Examiner Michael P. Mooney	Art Unit 2877	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on _____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) <u>5/17/02</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-3 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recites the limitation "said mounting block" in line 2. There is insufficient antecedent basis for this limitation in the claim.

Correction must be made.

For the purposes of the rejection below, it will be assumed that "said mounting block" is replaced with "the mounting block".

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

Claims 1, 4, 6 are rejected under 35 U.S.C. 102b as being anticipated by Curzio (5611013).

Curzio, at figs. 3a & 3b, teaches an optical connector comprising a supporting block, a pair of guide pins protruding from the mounting block for mating with a connecting component, an array of active optical components recessed into said

supporting block so that a void is present between said active optical components and optic fibers carried by said connecting component, and a transparent filler material filling said void and providing a light path between said active optical components and said optic fibers.

Thus claim 1 is met.

Curzio, at figs. 3a & 3b, teaches an optical coupling comprising a first connector portion and a second connector portion mating with said first connector portion, said first connector portion comprising: mounting block (1); a pair of guide pins protruding from said mounting block; an array of active optical components recessed into said mounting block; and said second connector portion comprising: a supporting block (7); a bundle of optic fibers carried by said supporting block terminating at an end face of said supporting block; and wherein a void is present between said active optical components and said end face of said supporting block, and a transparent filler material fills said void to provide a light path between said active optical components and said optic fibers (figs. 3a & 3b; col. 6 lines 40-45).

Thus claim 2 is met.

Curzio, at figs. 3a & 3b, teaches supporting block of said second portion is transversely sliced. Thus claim 6 is met.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 2,3, 5, 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Curzio (5611013).

Curzio, at figs. 3a & 3b, teaches an optical connector comprising a supporting block, a pair of guide pins protruding from the mounting block for mating with a connecting component, an array of active optical components recessed into said supporting block so that a void is present between said active optical components and optic fibers carried by said connecting component, and a transparent filler material filling said void and providing a light path between said active optical components and said optic fibers.

Curzio, at figs. 3a & 3b, teaches an optical coupling comprising a first connector portion and a second connector portion mating with said first connector portion, said first

connector portion comprising: mounting block (1); a pair of guide pins protruding from said mounting block; an array of active optical components recessed into said mounting block; and said second connector portion comprising: a supporting block (7); a bundle of optic fibers carried by said supporting block terminating at an end face of said supporting block; and wherein a void is present between said active optical components and said end face of said supporting block, and a transparent filler material fills said void to provide a light path between said active optical components and said optic fibers (figs. 3a & 3b; col. 6 lines 40-45).

Curzio does not use the exact expression "...transparent filler material is silicone" as in instant claims 2 and 5. Curzio, however, does teach "...an elastic encapsulating material or layer 23, e.g. of silicon rubber..." . Thus, it would have been obvious to use the exact expression "...transparent filler material is silicone" because it is notoriously well known (NWK) to use silicon rubber and silicone interchangeably in such applications.

Thus claims 2 and 5 are rejected.

Although Curzio does not expressly use the words "heat sink" to describe the mounting block, this would have been obvious because it is NWK to use materials which are heat sinks for elements such as mounting blocks in such applications.

Thus claim 3 is rejected.


Although Curzio does not expressly state "an optical coupling comprising a pair of optical fibers with abutting ends defining a void therebetween", this would have been obvious because it is NWK to use optical fibers in optical modules/capsules such as Curzio's #1 in figs. 1-3 thus yielding a fiber-to-fiber coupling such as described in instant claim 7. Thus claim 7 is rejected.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael P. Mooney whose telephone number is 703-308-6125. The examiner can normally be reached during weekdays, M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Frank G. Font can be reached on 703-308-4881. The fax phone numbers for the organization where this application or proceeding is assigned are 703-308-7722 for regular communications and 703-308-7721 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956. An alternative useful number for status inquiries is 703-306-3329.


Michael P. Mooney
Examiner
Art Unit 2877


Frank G. Font
Supervisory Patent Examiner
Art Unit 2877

FGF/mpm
9/20/03